



Service Manual

Stereo Turntable

TP8500 (EUROPE)
(W. GERMANY)
(SPAIN)



Specifications

NOTE:

The below mentioned specifications are mainly based on the IHF measurements standard. They can therefore not directly be compared with specifications based on the DIN standard or other standards.

Motor	DC servo motor	Power require-	
Drive system.	Belt drive/Full auto	ments	AC: 220V, 50Hz
Wow and flutter	0.05% (WRMS)	Power consump-	
Cartridge and		tion.	2 W
stylus	Magnetic stereo	Dimensions	
	cartridge	(W x D x H)	Approx. 420 x 346
	(No. MG-85J)		x 115mm
	Stylus 0.6 mil		(16-1/2" x 13-5/8"
	diamond		x 4-9/16")
		Weight.	Approx. 3.8 kg
			(8 lbs. 6 ozs.)

PRODUCT CODE No.
134 753 17/EUROPE
134 753 22/W. GERMANY
134 753 21/SPAIN

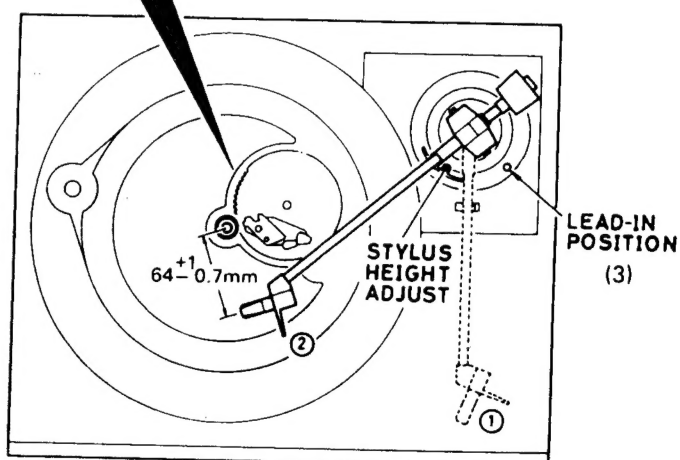
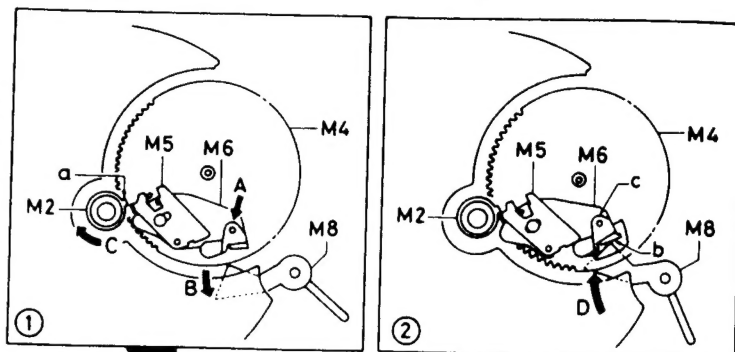
Specifications subject to change without notice.

ADJUSTMENT

ADJUSTMENT OF AUTO-RETURN

Remove the turntable to set the tone arm in the reset position (1). Set the pawl of the small gear of the center shaft in the position shown in attached drawing. Besides, lower trip lever M6 and trip lever M8 pushed toward the arrow marks A and B, respectively.

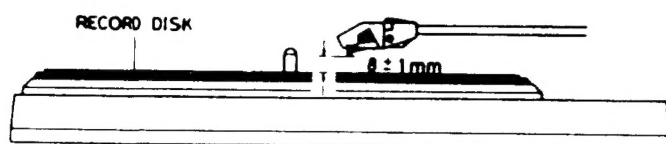
Turn shaft assy. M2 toward the arrow mark C to set so that the convex part of pinion and the tip of claw for the engagement lever M5 contact each other (arrow mark a). Next, move the tone arm (toward arrow mark D). When the distance between the center shaft of turntable and the needle tip becomes $64 +1/-0.7$ mm (2), insert a blade screwdriver into part C, and adjust by turning it clockwise or counterclockwise so that the tip of trip lever M8 begins to contact with lower trip lever M6 (arrow mark b). Finally put on the turntable, and check the performance of auto-return.



ADJUSTMENT OF STYLUS HEIGHT

Setting the record disk in place, raise the tonearm lift lever.

Bring the tonearm to above the disk, and insert a screwdriver into the "stylus height adjust" hole (see drawing for ADJUSTMENT OF AUTO-RETURN) and turn it right or left until the distance between the disk and stylus becomes 8 ± 1 mm.



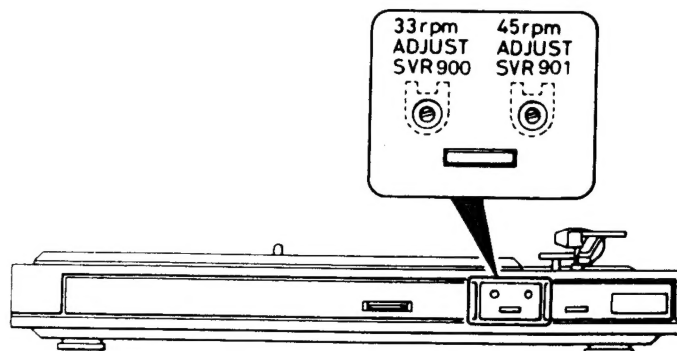
ADJUSTMENT OF TURNTABLE SPEED

Set the PITCH CONTROL in the middle position, place the stroboscope pattern on the turntable platter.

Set the speed select switch into the desired speed.

33 rpm Adjust the SVR900 so that the graduates on the stroboscope pattern seems to be in stop.

45 rpm Adjust the SVR901 similarly.



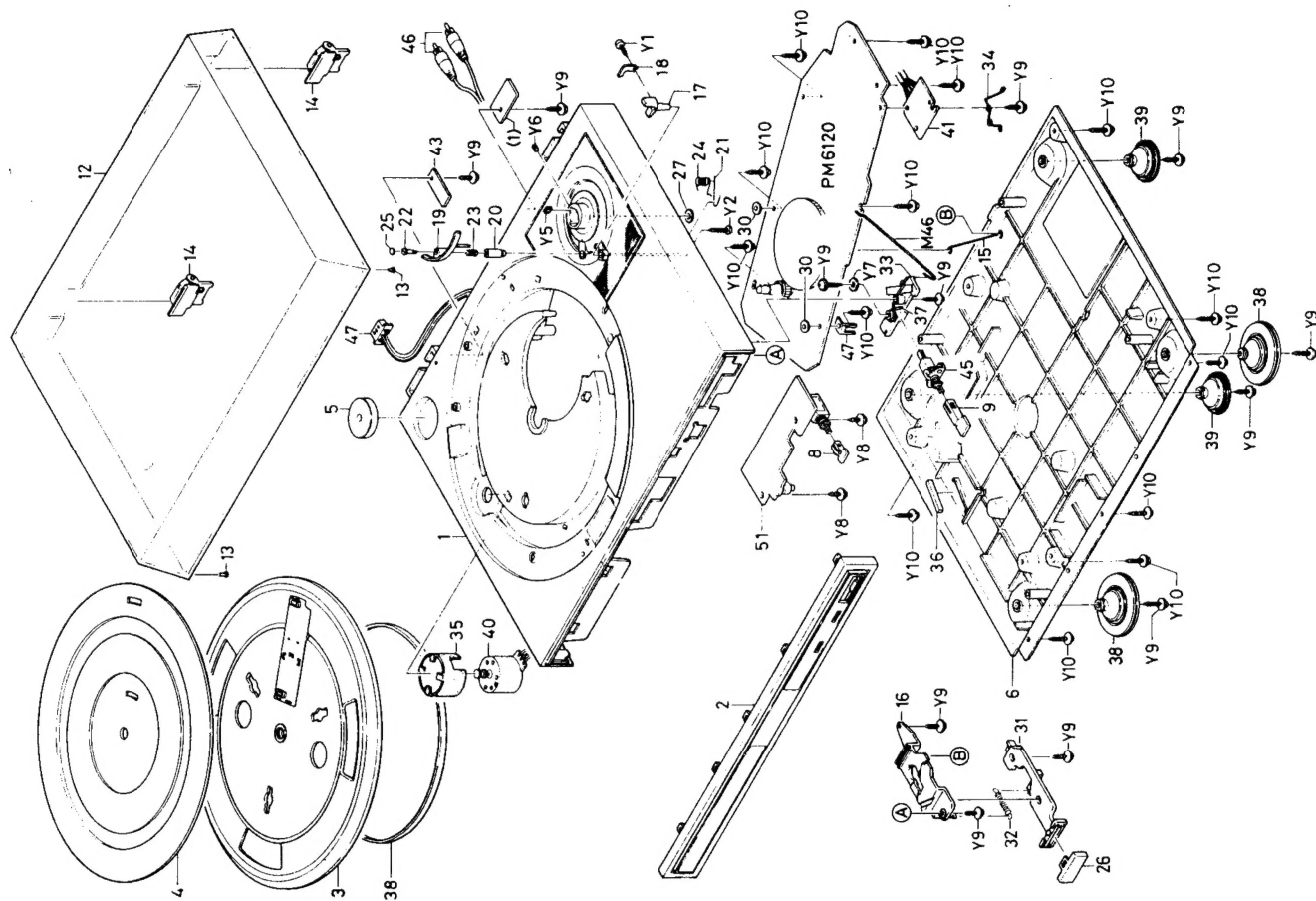
ADJUSTMENT OF LEAD-IN POSITION

(1) Load with test record RG-325.

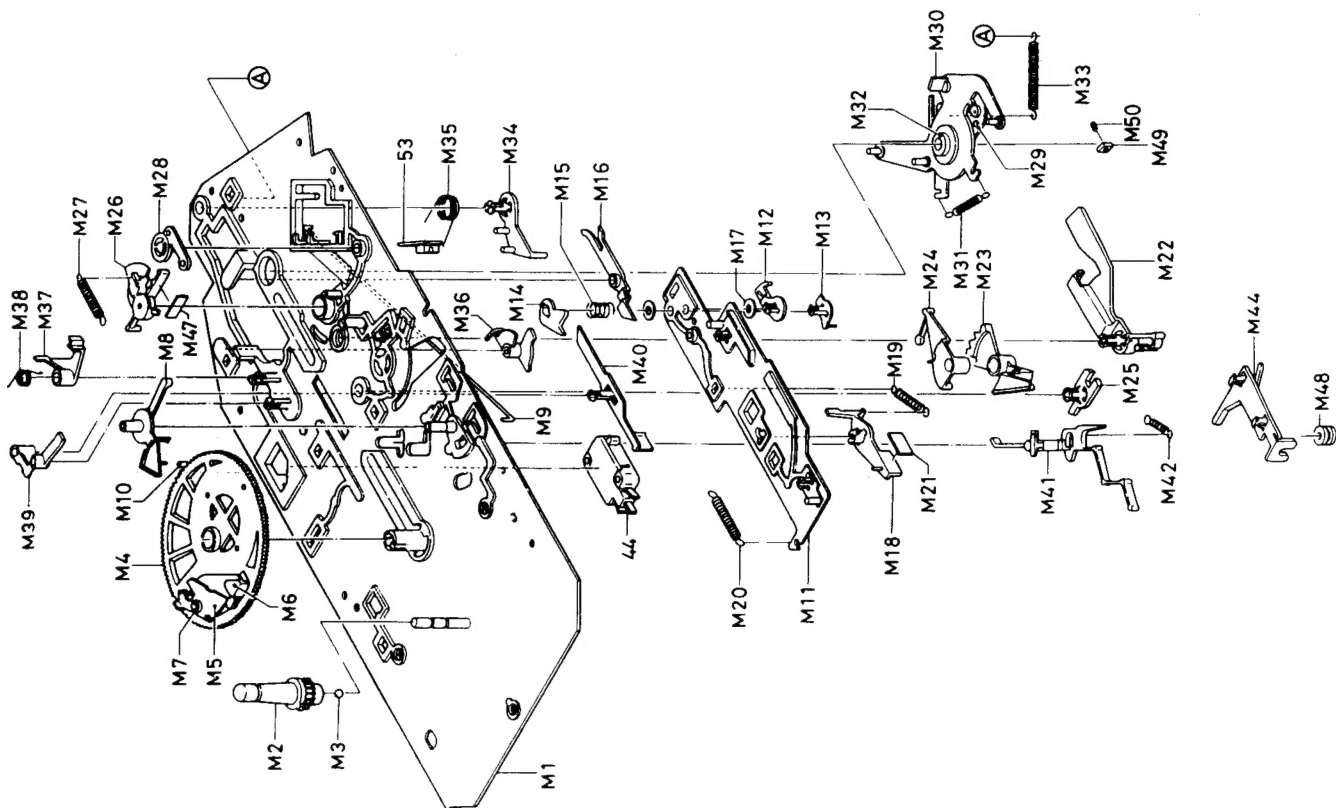
(2) Set speed selector to 33.

(3) Press start/stop button to set in play mode. If the sound output from the record is telling other figure than 20 to 22, return the tone arm to the tone arm rest, and insert screwdriver in to adjusting hole (3) and adjust.

EXPLODED VIEW (CABINET & CHASSIS)



EXPLODED VIEW (MECHANISM)



PARTS LIST

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol \triangle in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with \triangle , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.

Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.

PACKING & ACCESSORIES

Ref. No.	Part No.	Description
or or	614 175 4123	FOAM PLASTIC CASE, LEFT
	614 175 4130	FOAM PLASTIC CASE, RIGHT
	614 212 0910	INNER CORR CASE, (SPAIN)
	614 209 7571	INNER CORR CASE, (EUROPE)
	614 212 0927	INNER CORR CASE, 215X175, (W GERMANY)
or or	614 179 4204	PAD, TOP
	614 179 4914	PAD, SET TOP
	614 179 6796	PAD, RUBBER SHEET
	614 212 0972	INST MANUAL, (SPAIN)
	614 209 7601	INST MANUAL, (EUROPE)
or or	614 212 0989	INST MANUAL, (W GERMANY)
	614 176 4191	INNER POLY COVER, 350X400X0.03T
	614 177 0215	INNER POLYE LAMINA COVER, SET
	614 177 0239	INNER POLYE LAMINA COVER, SET
	614 211 7460	RATING PLATE, (SPAIN)
or or	614 211 7453	RATING PLATE, (EUROPE)
	614 211 7477	RATING PLATE, (W GERMANY)
	614 107 9721	BRACKET, T.T.FIX

CABINET & CHASSIS

Ref. No.	Part No.	Description
1	614 057 4548	DECK PANEL ASSY
2	614 192 7640	FRONT PANEL ASSY
3	614 057 0878	TURN TABLE ASSY
4	614 111 6044	SHEET, TURN TABLE
5	614 119 7128	SPACER, 45
6	614 061 3841	BOTTOM LID ASSY
8	614 195 0846	PUSH BUTTON, 33/45
9	614 195 0204	PUSH BUTTON, UP/DOWN
12	614 065 9733	DUST COVER ASSY
13	614 124 8226	RUBBER CUSHION, DUST COVER
14	614 112 3431	HINGE
16	614 108 0925	BRACKET, START/STOP
or	614 151 9166	SPRING WIRE, START/STOP
17	614 152 2258	REST, FIXED SIDE
18	614 152 2210	REST, MOBIL SIDE
19	614 152 2029	LIFTER, ARM UP/DOWN
20	614 145 6034	SHAFT, LIFTER POSITION
21	614 151 9135	SRPING WIRE, LIFTER UP/DOWN
22	412 004 9604	SPECIAL SCREW, LIFTER ADJ.
23	614 149 8645	SPRING COIL, LIFTER UP/DOWN
24	614 151 5120	SPRING COIL, LIFTER POSITION
25	614 125 0496	CUSHION, ORDER SCREW
26	614 195 0839	CUP KNOB, START/STOP
27	412 012 8804	SPECIAL WASHER, ARM LEVER
30	412 012 2901	SPECIAL WASHER, MECH-PANEL
31	614 112 8412	JOINT, START/STOP
32	614 151 9203	SPRING WIRE, JOINT RETURN
33	614 139 7955	LEVER, UP/DOWN
34	614 151 3980	SPRING COIL, OUP PUT PCB
35	614 124 8929	RUBBER CUSHION, MOTOR COVER
36	614 126 5322	CUSHION, MOTOR BOTTOM
37	614 151 9197	SPRING WIRE, UP/DOWN
38	614 211 7187	ASSY, FOOT, FRONT SIDE
39	614 212 0774	ASSY, FOOT
40	614 045 1887	COMMUTATE MOTOR ASSY

Ref. No.	Part No.	Description
	614 209 7502	MARKING PLATE

FIXING PARTS

Ref. No.	Part No.	Description
Y1	411 023 3006	SCR S-TPG PAN 2.6X6
Y2	411 023 1408	SCR S-TPG PAN 2.6X12
Y5	411 056 2502	NUT SQUARE 4
Y6	411 101 3904	SCR SET 4X6
Y7	411 088 3508	WASHER V 6X13X1
Y8	411 020 9803	SCR S-TPG BRZ + FLG 3X6
Y9	411 020 9902	SCR S-TPG BRZ + FLG 3X8
Y10	411 020 8905	SCR S-TPG BRZ + FLG 3X10

ELECTRICAL PARTS

Ref. No.	Part No.	Description
41	614 039 7451	P.C BOARD, OUT PUT RELAY
42	614 039 7529	P.C BOARD
44	614 019 1370	SWITCH
45	614 023 8396	SWITCH
46	614 022 4665	LEAD CORD, OUT PUT
47	\triangle 614 023 3100	POWER CORD
or	\triangle 614 203 0493	POWER CORD

CONTROL P.C. BOARD ASSY

Ref. No.	Part No.	Description
51	614 161 9316	P.C BOARD ASSY, CONTROL
or	\triangle 423 002 6809	FUSE 250V 0.2A
	\triangle 423 002 7202	FUSE 250V 0.2A
L901	614 123 0023	BRACKET FUSE, 5.1MM
	614 020 6548	SOCKET, 2P
	614 023 7955	SWITCH
	614 028 3709	FILTER
SVR1	614 006 8207	SEMI VR, 2K OHM
SVR2	614 006 8184	SEMI VR, 500 OHM
IC1	409 056 8808	IC UPC1470H
D901	407 004 9006	DIODE DSF10B
or	407 005 2303	DIODE DS135E
or	407 012 3300	DIODE 1SR35-200A
D902	407 004 9006	DIODE DSF10B
or	407 005 2303	DIODE DS135E
or	407 012 3300	DIODE 1SR35-200A
D903	407 004 9006	DIODE DSF10B
or	407 005 2303	DIODE DS135E
or	407 012 3300	DIODE 1SR35-200A
D904	407 004 9006	DIODE DSF10B
or	407 005 2303	DIODE DS135E
or	407 012 3300	DIODE 1SR35-200A
D905	407 007 9904	DIODE GMA01

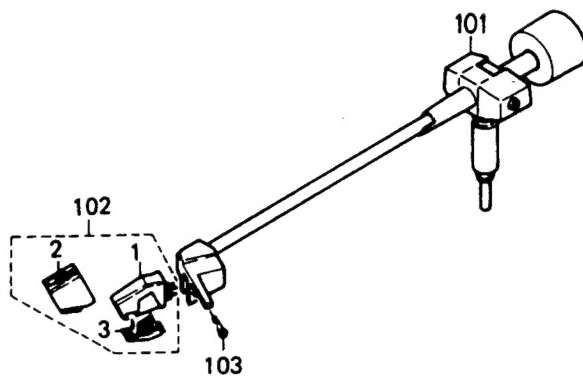
PARTS LIST

P.T P.C. BOARD ASSY

Ref. No.	Part No.	Description
53	614 161 9378	P.C BOARD ASSY, P.T
	614 123 2089	TERMINAL
	614 020 6548	SOCKET, 2P
	△ 614 043 5689	P.T

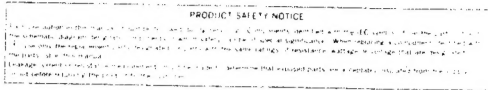
ARM ASSY

Ref. No.	Part No.	Description
101	614 211 1390	ARM ASSY
101-1	614 142 3425	ARM
101-2	614 137 1290	WEIGHT
102	614 211 1307	ASSY, CARTRIDGE
102-1	614 211 1352	CARTRIDGE
102-2	614 211 1369	STYLUS
102-3	614 211 1314	COVER
103	412 005 1607	SPECIAL SCREW



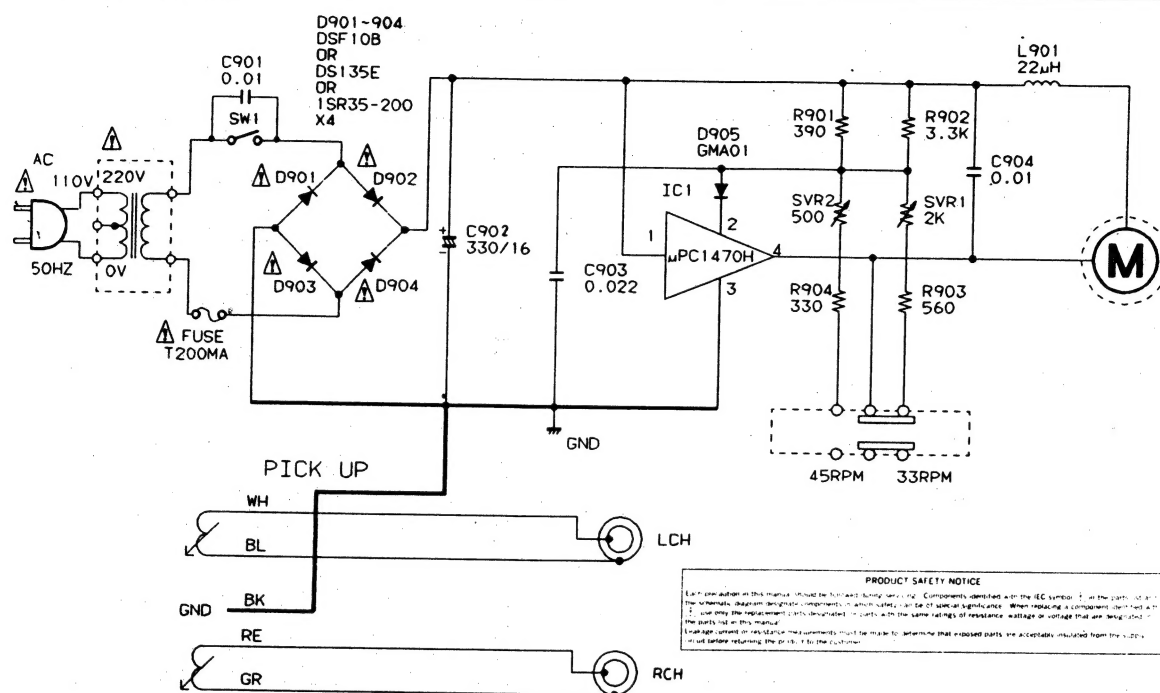
MECHANISM

Ref. No.	Part No.	Description
M1	614 067 2305	CHASSIS ASSY
M2	614 070 7861	SHAFT ASSY
M3	614 118 5903	STEEL BALL
M4	614 134 7325	GEAR
M5	614 141 8810	LEVER
M6	614 070 0244	LEVER ASSY
M7	614 127 6038	SPECIAL WASHER
M8	614 139 7344	LEVER
M9	614 151 9036	SPRING WIRE
M10	614 130 5547	TUBE
M11	614 138 8595	SLIDE
M12	614 139 7351	LEVER
M13	614 139 7368	LEVER
M14	614 139 7375	LEVER
M15	614 151 6356	SPRING COIL
M16	614 139 7382	LEVER
M17	412 012 8101	SPECIAL WASHER
M18	614 139 7399	LEVER
M19	614 151 2617	SPRING COIL
M20	614 151 4000	SPRING COIL
M21	614 126 3779	CUSHION
M22	614 139 7405	LEVER
M23	614 139 7412	LEVER
M24	614 139 7429	LEVER
M25	614 139 7436	LEVER
M26	614 139 7443	LEVER
M27	614 151 4017	SPRING COIL
M28	614 139 7450	LEVER
M29	614 139 7306	LEVER
M30	614 139 7313	LEVER
M31	614 151 2594	SPRING COIL
M32	614 129 5428	FIXER
M33	614 151 2242	SPRING COIL
M34	614 139 7467	LEVER
M35	614 151 9043	SPRING WIRE
M36	614 139 7474	LEVER
M37	614 141 9183	LEVER
M38	614 148 4617	SPRING WIRE
M39	614 141 9121	LEVER
M40	614 139 7481	LEVER
M41	614 139 7498	LEVER
M42	614 151 4048	SPRING COIL
M44	614 138 8601	SLIDE
M46	614 151 9029	SPRING WIRE
M47	614 126 3991	CUSHION
M48	614 124 6468	RUBBER CUSHION
M49	411 056 2502	SQUARE NUT 4
M50	411 101 3904	HEX SOCKET HEADLESS SCREW 4X6

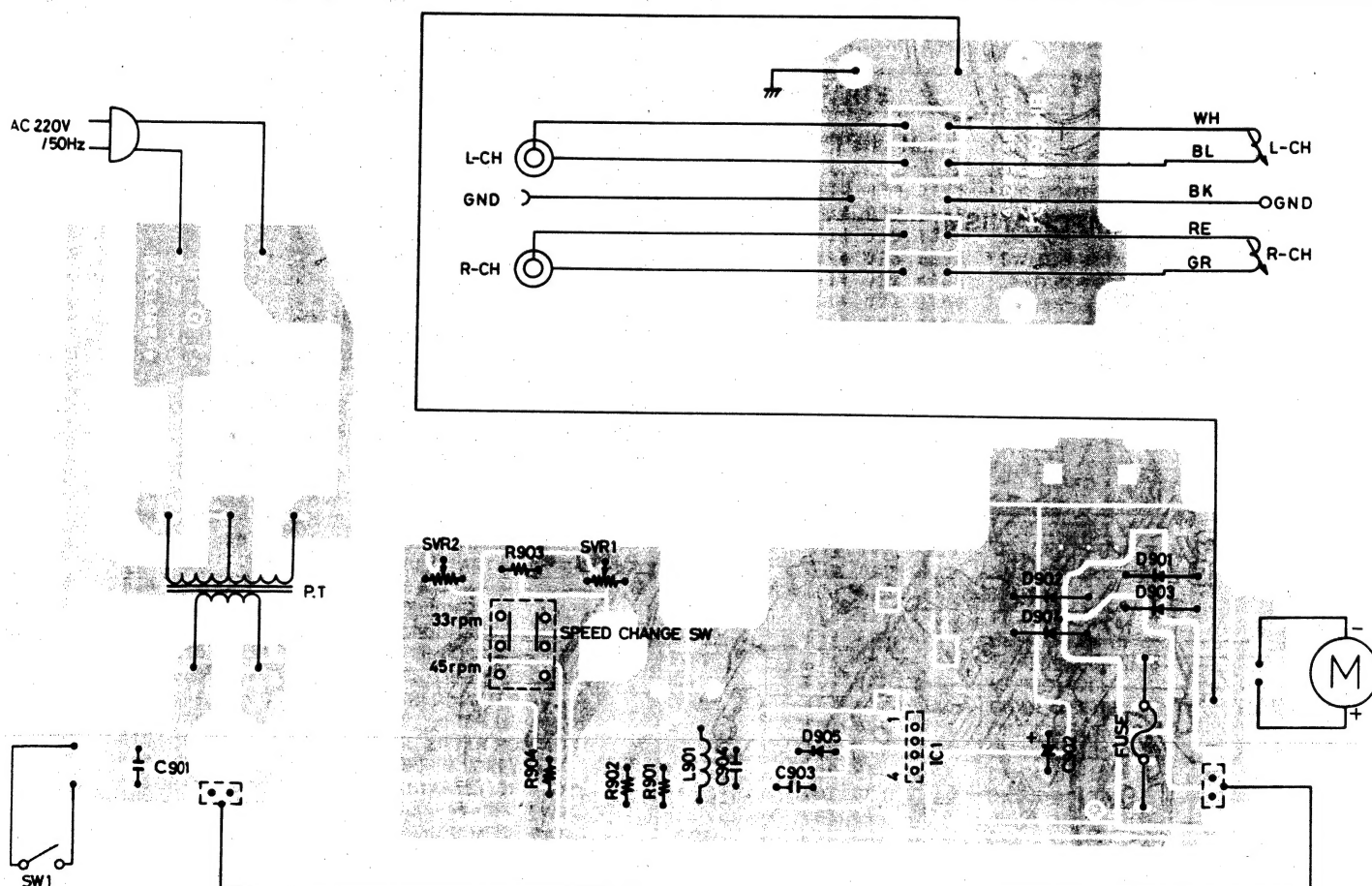




SCHEMATIC DIAGRAM



WIRING DIAGRAM



SANYO